

STATEMENT OF BASIS (AI No. 19122)

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0070297 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: University of Louisiana at Lafayette
University of Louisiana at Lafayette Farm Laboratory
P.O Box 44650
Lafayette, LA 70504

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Maxon Graham

DATE PREPARED: 14 March 2007

1. PERMIT STATUS

A. Reason For Permit Action:

Permit revocation and reissuance of a current Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term. The Office of Environmental Services (Office) has received a request for modification on August 4, 2006, for issuance of an LPDES permit. Additional information was received on October 16, 2006 and March 14, 2007.

B. LPDES permits – LAG531806

LPDES permit effective date: June 3, 2005

LPDES permit expiration date: November 30, 2007

LWDPS permits – Permit Number:

WP 0181

LWDPS Issued: August 31, 1984

LWDPS Expiration: August 30, 1989

C. Date Application Received: August 4, 2006

By the authority of edict LA R.S. 30:2001, *et seq.*, and the Environmental Regulatory Code, Part IX, Water Quality Regulations, LPDES permit LAG531806 shall be canceled upon issuance of this final permit.

2. FACILITY INFORMATION

A. FACILITY TYPE/ACTIVITY - Research Farm Operation

This is a university research farm. The Farm Lab no longer houses dairy cattle as of May 1, 2005. The facility still has 4-6 mature pigs and about 20 feeder pigs year-round. The pens are washed down once a day and the water is discharged through Outfall 002 after treatment in 2-cell oxidation pond system. Tractors and other farm equipment is washed and the water is discharged through Outfall 001 after 3-cell oxidation pond treatment system. In addition, the classrooms and other buildings remain open and have working restrooms and showers. Because there is an equipment wash outfall at this facility and a

small number of swine remain for teaching purposes the current General Sanitary permit authorization will be revoked and an individual permit reissued.

B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: I
3. Wastewater Type: III
4. SIC code: 8733

C. LOCATION - 1234 W.J. Bernard Road, St. Martinville, St. Martin Parish
Latitude 30° 5' 21", Longitude 91° 52' 10"

3. OUTFALL INFORMATION

Outfall 001

Discharge Type: Treated sanitary wastewater and equipment washdown wastewater
Treatment: Oxidation pond
Location: at the point of discharge from the oxidation pond 1000 ft S/SW of the front gate, in the SW quadrant of the farm, near the hay barn. Latitude 30° 05' 11"; Longitude 91° 52' 15"
Flow: 100 GPD
Discharge Route: via local drainage to Bayou Tortue

Outfall 002

Discharge Type: Treated sanitary wastewater and animal (swine) wastewater
Treatment: Oxidation pond
Location: At the point of discharge from the oxidation pond 1200 ft E of front gate, in the SE quadrant of the farm near the pig building. Latitude 30° 05' 19"; Longitude 91° 51' 57"
Flow: 400 GPD
Discharge Route: via local drainage to Bayou Tortue

Outfall 003

Discharge Type: Treated Sanitary wastewater
Treatment: Mechanical sewage treatment plant
Location: at the point of discharge from the effluent pipe 200 ft SW of front gate, in the SW quadrant of farm next to the Welcome Center. Latitude 30° 05' 19"; Longitude 91° 52' 13"
Flow: 100 GPD
Discharge Route: via local drainage to Bayou Tortue

Outfall 004

Discharge Type: Treated Sanitary wastewater
Treatment: Mechanical sewage treatment plant
Location: at the point of discharge from the effluent pipe 2500 ft NW of front gate in the NW quadrant of farm near the Conservatory. Latitude 30° 05' 35"; Longitude 91° 52' 31"
Flow: 100 GPD
Discharge Route: via local drainage to Bayou Tortue

Outfall 005

Discharge Type: Treated Sanitary wastewater
Treatment: Mechanical sewage treatment plant
Location: at the point of discharge from the effluent pipe 1500 ft N/NE of front gate in the NE quadrant of farm behind westernmost tenant house. Latitude 30° 05' 35"; Longitude 91° 52' 06"
Flow: 100 GPD
Discharge Route: via local drainage to Bayou Tortue

Outfall 006

Discharge Type: Treated Sanitary wastewater
Treatment: Mechanical sewage treatment plant
Location: at the point of discharge from the effluent pipe 1500 ft N/NE of front gate in the NE quadrant of farm behind middle tenant house. Latitude 30° 05' 34"; Longitude 91° 52' 06"
Flow: 100 GPD
Discharge Route: via local drainage to Bayou Tortue

Outfall 007

Discharge Type: Treated Sanitary wastewater
Treatment: Mechanical sewage treatment plant
Location: at the point of discharge from the effluent pipe 1500 ft N/NE of front gate in the NE quadrant of farm behind easternmost tenant house. Latitude 30° 05' 34"; Longitude 91° 52' 05"
Flow: 400 GPD
Discharge Route: via local drainage to Bayou Tortue

Outfall 008

Discharge Type: Treated Sanitary wastewater
Treatment: Mechanical sewage treatment plant
Location: at the point of discharge from the effluent pipe 1500 ft N/NE of front gate in the NE quadrant of farm behind the Cade Solar House. Latitude 30° 05' 34"; Longitude 91° 52' 04"
Flow: 100 GPD
Discharge Route: via local drainage to Bayou Tortue

Outfall 009

Discharge Type: Treated Sanitary wastewater
Treatment: Mechanical sewage treatment plant
Location: at the point of discharge from the effluent pipe 2200 ft N/NE of front gate in the NE quadrant of farm near the crawfish research center. Latitude 30° 05' 38"; Longitude 91° 51' 57"
Flow: 100 GPD
Discharge Route: via local drainage to Bayou Tortue

4. RECEIVING WATERS

STREAM - local drainage then into Bayou Tortue

BASIN AND SEGMENT - Vermilion-Teche River Basin Basin, Segment 060908

DESIGNATED USES - a. primary contact recreation

- b. secondary contact recreation
- c. propagation of fish and wildlife

5. TMDL STATUS

Subsegment 060908, Spanish Lake, is not listed on LDEQ's Final 2004 303(d) list as impaired. However, subsegment 060908 was previously listed as impaired for organic enrichment/low DO, for which the below TMDLs have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDLs and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

To date, the following TMDLs have been completed: *Spanish Lake DO and Nutrients* effective 5/2/2002.

Organic enrichment/low DO are among the effluent characteristics listed for discharges of equipment washwater and sanitary wastewater, however the discharge is not directly to Spanish Lake and the flow is negligible and does not require an update to the TMDL. The facility was not listed in the TMDL, however the discharge from this facility will be recorded for future TMDL updates. Therefore, the discharge for this facility should not cause or contribute to the violation of water quality standards for organic enrichment/low DO in the receiving stream.

6. PROPOSED EFFLUENT LIMITS

A. BASIS - See Rationale below.

B. Changes from the previous permit:

Outfall 001 - Equipment washwater has been added to the discharge from Outfall 001.

Washwater parameters have been included in the effluent limitations for this outfall.

Outfall 002 - Swine wastewater has been added to the discharge from Outfall 002.

Outfalls 003, 004, 005, 006, 007, 008, 009 - have been added to the permit based on inspection report dated May 10, 2005, and at the request of the facility.

7. COMPLIANCE HISTORY/COMMENTS

A. **WQMD** - There are no open, appealed or pending OES enforcement actions as of March 15, 2007.

WE-CAT-06-0162 - Referred to enforcement following the July 18, 2006 inspection. The responsible person at the facility elected to attend a SWAT seminar and the enforcement action was closed.

Inspections - Conducted on July 18, 2006, by Shane Miller of the Acadiana Regional Office. At the site, the permit was available as were the necessary DMR and lab reports. The facility was not discharging at the time of inspection and the oxidation pond levees were clean and intact. There were 7 outfalls at the facility that were not permitted at the different buildings on the farm.

B. **DMR Review/Excursions** – DMRs were reviewed for the 2 year period from January 2005 to December 2006 for Outfall 001. DMRS were reviewed for Outfall 002 for the period from July 2005 to December 2006 which is the date that the outfall was first permitted.

C. The following excursions were reported for Outfall 001:

Date	Parameter	Outfall	Reported Value	Permit Limits
01/01 – 06/30/06	Fecal Coliform	001	> 1000 colonies / 100 mL	< 400 colonies / 100 mL
07/01 – 12/31/05	Fecal Coliform	001	> 1000 colonies / 100 mL	< 400 colonies / 100 mL
05/01 – 05/31/05	TSS	001	38 mg / L (average)	30 mg / L (average)
02/01 – 02/28/05	BOD ₅	001	45 mg / L (average)	30 mg / L (average)
02/01 – 02/28/05	TSS	001	121 mg / L (average)	30 mg / L (average)
02/01 – 02/28/05	TSS	001	216 mg / L (maximum)	45 mg / L (maximum)

8. EXISTING EFFLUENT LIMITS

Outfall 001, 002 – Treated sanitary wastewater (estimated flow; 100 gpd from 001; 400 gpd from 002)

Parameter	Limitation		Monitoring Frequency
	Monthly Average	Weekly Average	
BOD ₅	---	45 mg/L	semiannually
Fecal Coliform Colonies/100 mL	---	400	semiannually
Flow	---	Report	semiannually
TSS	---	135 mg/L	semiannually
pH – Allowable Range (su)	6.0 (min)	9.0 (max)	semiannually

9. ENDANGERED SPECIES

The receiving waterbody, Subsegment 060908 of the Vermilion-Teche River Basin Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

10. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the

National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

**Rationale for University of Louisiana at Lafayette
Farm Laboratory**

1. **Outfall 001** – Treated sanitary and equipment washdown wastewater, estimated flow is 100 gpd

Parameter	Limitation		Reference
	Monthly Average	Daily Maximum	
Flow	Report	Report	LAG750000; BPJ*; similar discharges
Soaps and/or Detergents	Report	N/A	LAG750000; BPJ*; similar discharges
pH – Allowable Range (s.u.)	6.0 (minimum)	9.0 (maximum)	LAG750000; BPJ*; similar discharges
TSS	---	135 mg/L	LAG750000; BPJ*; similar discharges
COD	---	300 mg/L	LAG750000; BPJ*; similar discharges
Oil and Grease	---	15 mg/L	LAG750000; BPJ*; similar discharges
Visible Sheen	---	No Presence	LAG750000; BPJ*; similar discharges
BOD ₅	---	45	LAG750000; BPJ*; similar discharges
Fecal Coliform Colonies	---	400	LAG750000; BPJ*; similar discharges

Treatment: 3 cell oxidation pond system

Monitoring Frequency: Visible Sheen shall be monitored monthly, and all other parameters monitored quarterly at the point of discharge from the oxidation pond prior to mixing with waters of the state. Quarterly frequency is assigned through BPJ based on previous compliance history.

Limits Justification: the limits and monitoring frequencies for this permit are based on BPJ, current guidance for similar discharges from other facilities, and the Exterior Vehicle Wash Wastewater Permit (LAG750000), effective March 15, 2004.

* Existing permits for similar outfalls
BPJ Best Professional Judgement
su Standard Units

NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated

2. **Outfall 002** - Treated sanitary wastewater and animal (swine) wastewater; total estimated flow is 400 gpd

Parameter	Limitation		Reference
	Monthly Average	Weekly Average	
Flow	Report	Report	LAG530000; previous permit: similar discharges
pH – Allowable Range (su)	6.0 (min)	9.0 (max)	LAG530000; previous permit: similar discharges
BOD ₅	---	45 mg/L	LAG530000; previous permit: similar discharges
Fecal Coliform Colonies/100 mL	---	400	LAG530000; previous permit: similar discharges
TSS	---	135 mg/L	LAG530000; previous permit: similar discharges

Treatment: 2 cell oxidation pond system

Monitoring Frequency: semi-annually at the point of discharge from the oxidation pond prior to mixing with waters of the state.

Limits Justification: limits and monitoring frequencies are based on BPJ, current guidance for similar discharges from other facilities, and the Class I Sanitary General Permit, LAG530000 effective December 1, 2002.

3. **Outfall 003, 004, 005, 006, 007, 008, 009** - Treated sanitary wastewater, total estimated flow is 1000 gpd

Parameter	Limitation		Reference
	Monthly Average	Weekly Average	
Flow	Report	Report	LAG530000; similar discharges
pH – Allowable Range (su)	6.0 (min)	9.0 (max)	LAG530000; similar discharges
BOD ₅	---	45 mg/L	LAG530000; similar discharges
Fecal Coliform Colonies/100 mL	---	400	LAG530000; similar discharges
TSS	---	45 mg/L	LAG530000; similar discharges

Treatment: mechanical sewage treatment plant

Monitoring Frequency: semi-annually at the point of discharge from the sewage treatment plants prior to mixing with waters of the state.

Limits Justification: limits and monitoring frequencies are based on BPJ, current guidance for similar discharges from other facilities, and the Class I Sanitary General Permit, LAG530000 effective December 1, 2002.

* Existing permits for similar outfalls
BPJ Best Professional Judgement
su Standard Units

NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

As per LAC 33:IX.2511.B.14.a-k, storm water discharges from facilities classified as SIC code 8733 are not considered to be associated with industrial activities. Therefore, a SWP3 is not included in the permit.